## CrosswordPuzzle

Theme: Microscopy Grab Bag
by Aubrey Penn and Erica Stevens


| 1 | 2 | 3 | 4 | 5 |  | 6 | 7 |  | 8 | 9 |  |  | 10 | 11 |
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| 12 |  |  |  |  |  | 13 |  | 14 |  |  |  |  | 15 |  |
| 16 |  |  |  |  |  |  |  |  |  |  | 17 | 18 |  |  |
|  |  | 19 |  |  |  | 20 |  |  | 21 |  |  |  |  |  |
| 22 | 23 |  |  |  |  | 24 |  |  |  |  | 25 |  |  |  |
|  |  |  |  | 26 | 27 |  |  | 28 |  |  | 29 |  |  |  |
| 30 |  | 31 |  |  |  | 32 | 33 |  | 34 | 35 |  |  | 36 | 37 |
| 38 |  |  |  |  |  | 39 |  |  |  |  |  | 40 |  |  |
| 41 |  |  |  | 42 |  |  |  |  | 43 |  | 44 |  |  |  |
| 45 |  |  |  |  |  |  |  | 46 |  |  |  |  |  |  |
|  |  | 47 | 48 |  | 49 |  | 50 |  |  | 51 |  | 52 | 53 | 54 |
| 55 | 56 |  |  |  |  |  | 57 |  | 58 |  |  |  |  |  |
| 59 |  |  |  |  |  | 60 |  |  | 61 |  |  |  |  |  |
| 62 |  |  |  |  | 63 |  |  |  |  |  |  | 64 | 65 |  |
| 66 |  |  |  |  |  |  |  |  | 67 |  |  |  |  |  |

## Across

1. Screen type nicknamed "green screen"
2. Lens type that bends parallel rays so that they converge
3. Micrographia book author
4. August date of the PMCx60 at M\&M 2020
5. Image not having much detail (abbr.)
6. " 1 " of Standard Temperature and Pressure
7. Urgent request
8. Gentle tap, often on the shoulder
9. Famous American poet's first initials (abbr.)
10. Foolery, madness
11. Minor professional ice hockey league in Canada from 1959-1963 (abbr.)
12. Many street addresses end with this in the US (abbr.)
13. "A" in Texas University's microscope-focused CASM
14. Country where all members of the MTO Editorial Board are located (abbr.)
15. Germany country code (abbr.)
16. In an optical microscope, this value decreases with increasing magnification
17. Consumed
18. Moving and active
19. Hat type that is tall and cylindrical
20. Accelerating $\qquad$ , electron high tensions (pl.)
21. Multiferroic design components for drift compensation (slang, pl.)
22. Cancellation of unwanted signal by generating an out-of-phase waveform (abbr.)
23. Potent poison element (abbr.)
24. Microscope type that uses light as the source of illumination
25. Point (or plane) of interest
26. $180^{\circ} * \pi /$
27. Two letters joined into one glyph, for example, æ
28. Seen
29. Inert gas (abbr.)
30. Former postal abbreviation of Nebraska (abbr.)
31. Scale that Transmission Electron Microscopes typically operate on
32. Vitreous necessity in Cryo-EM
33. The fourth dimension
34. Friendly greeting to the ANL scientist and MSA member that patented the Scanning Confocal Electron Microscope

## Down

1. "P" in DPC
2. Electrons with high kinetic energy
3. Onomatopoeia exclamation after getting hit in the stomach
4. "Cheers" equivalent with Old Norse roots
5. Rat, ant, cockroach, etc., for example
6. One or the
7. Surface characterization technique using low-angle diffraction of electrons (abbr.)
8. Town in northern France
9. NYC slang for over-the-top (abbr.)
10. Choose via vote
11. Used by Röntgen to see the bones of his wife's hand in 1895 (pl.)
12. Range of wavelengths used to see heat
13. Italian street food
14. Force exerted on electrons in EM lenses
15. Concept first theorized by Einstein
16. Graphical, interactive view seen in an app or program (abbr.)
17. Group 14 element that has an English name but a Latin abbreviation (abbr.)
18. $\qquad$ search, looking for manuscripts on a scientific topic (slang)
19. Spherical if originating from a point source
20. Elongated reciprocal lattice points (pl.)
21. "Go" in Scottish
22. Network of satellites for telecommunications (abbr.)
23. Small drinks (pl.)
24. Prefix for "three"
25. Sound a dove makes
26. Mini albums (abbr., pl.)
27. Rose essential oil
28. The four major show business awards (acronym)
29. Boxer Muhammad
30. Celebratory dessert for March 14th
31. Ni-Fe alloy with low thermal expansion
32. Chemical reaction type to form carbon-carbon bonds
33. An excessively ludicrous comedic genre
34. "Stop! $\qquad$ out!" (2 words)
35. Overlaying digital images on the real world (abbr.)
36. Simple prying machine
37. Physicist with an eponymous lunar impact crater, refractometer, number, and theory
38. Signal amplification applied by an image sensor
39. Approximate landing time (abbr.)
40. US state NE of the Four Corners Monument (abbr.)

Answers to the crossword puzzle can be found on page 74.

